

SIERC, M.

Remarks on problems of organizational  
activity in enterprises. p. 32.  
TOBBTERMELES. (Uzem Tervgazdasagi es  
Szervezesi Tudomanyos Egyesulet)  
Budapest.  
Vol. 10, no. 5, May 1956.

SOURCES: EEAL - LC Oct. 1956. Vol. 5 No. 10

SPIRO, N.

New regulations for carrying out the terms of local budgets.  
Fin.SSSR 16 no.10:76-78 0 '55. (MIRA 9:2)  
(Moscow Province--Finance)

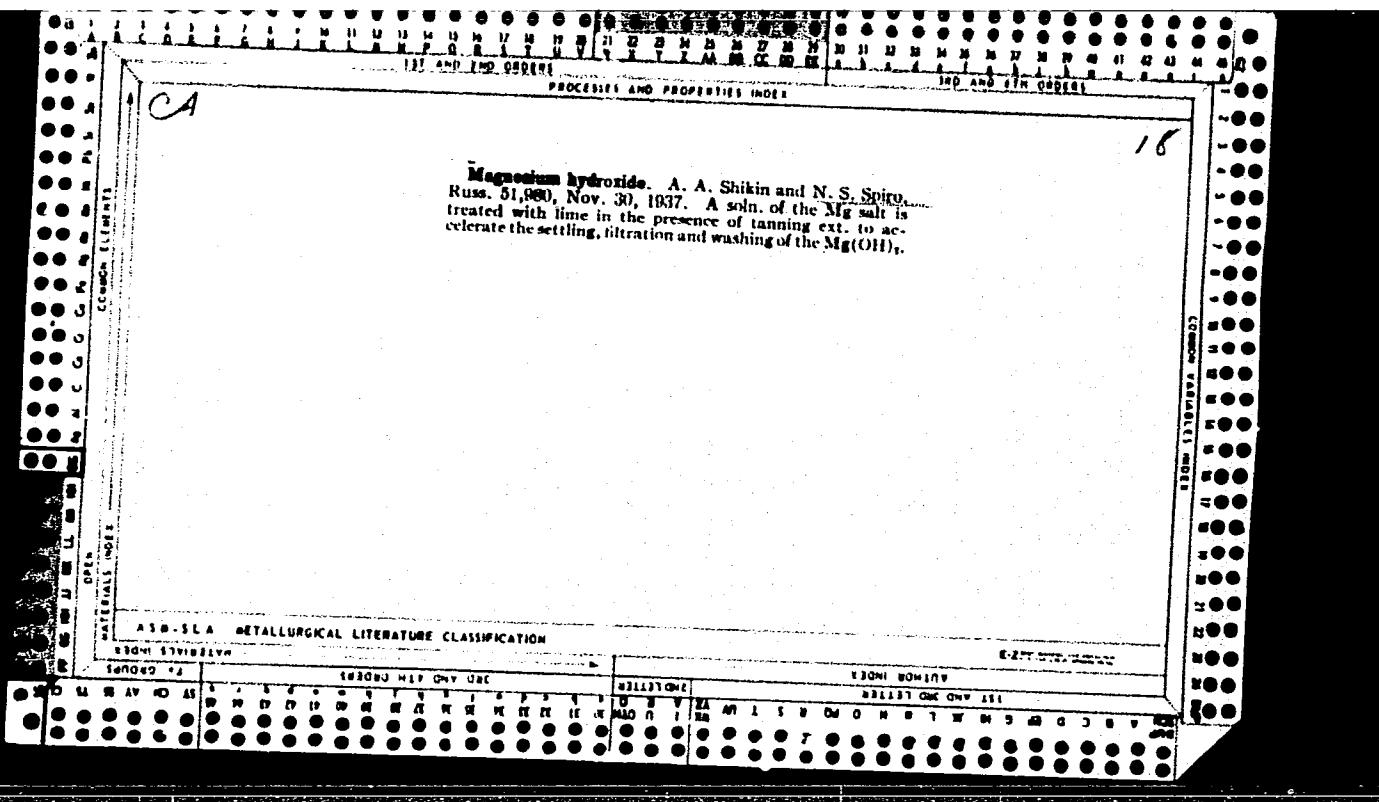
VORONOV P.S., kand.geologo-mineralogicheskikh nauk; SRIRO, N.S.,  
kand.khimicheskikh nauk

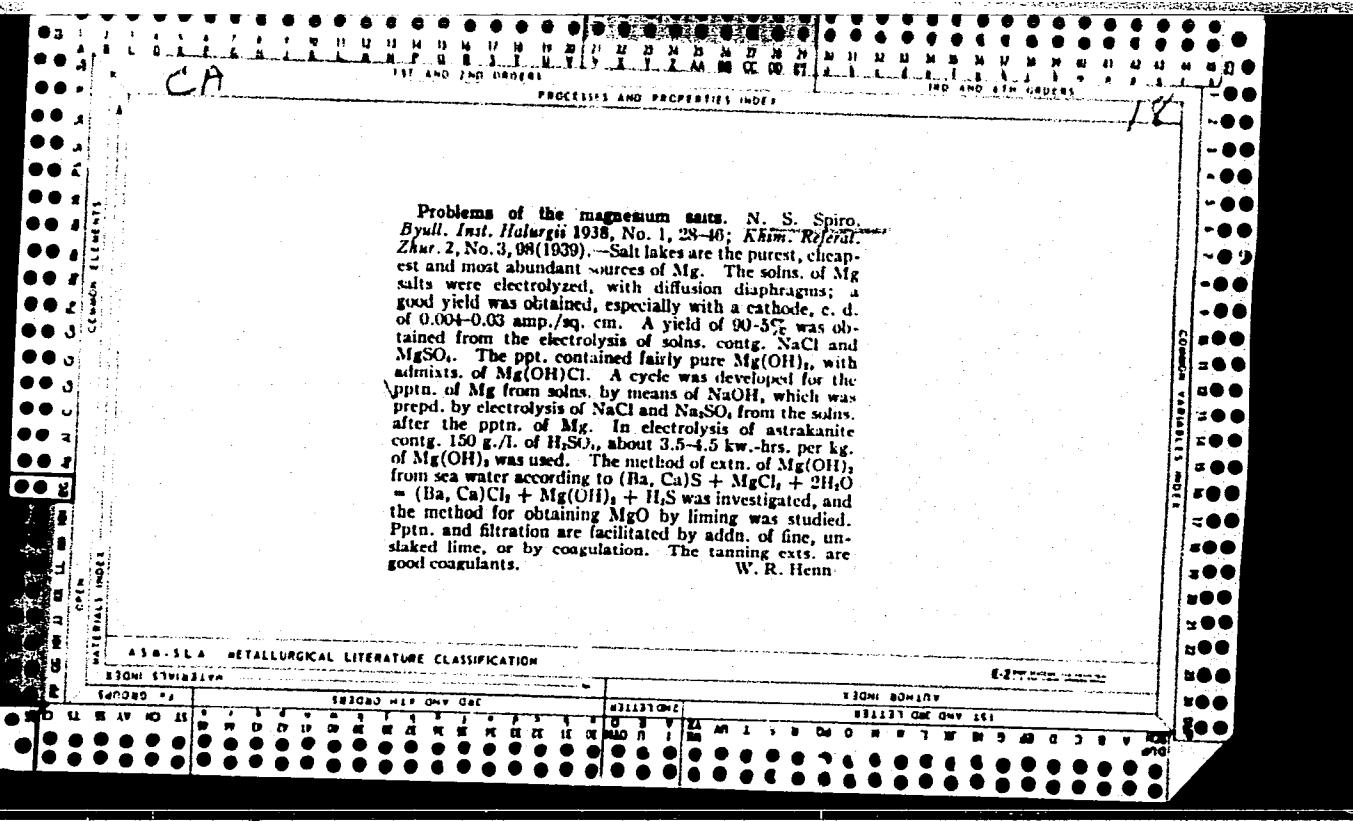
Distribution of oxides and hydroxides in Quaternary sediments on  
the coast of eastern Antarctica. Inform biul.Sov.antark.eksp.  
no.44:5-16 '63. (MIRA 17:4)

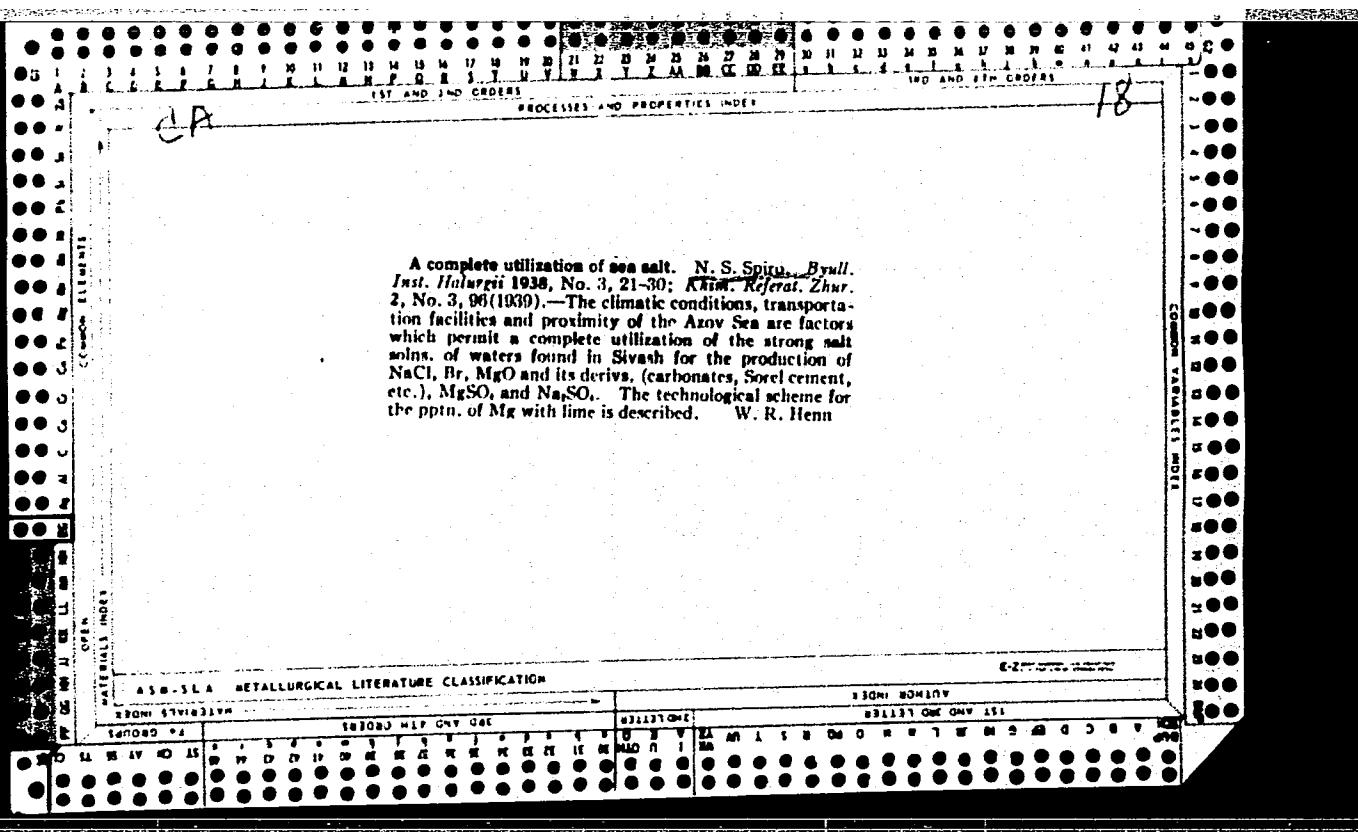
1. Nauchno-issledovatel'skiy institut geologii Arktiki.

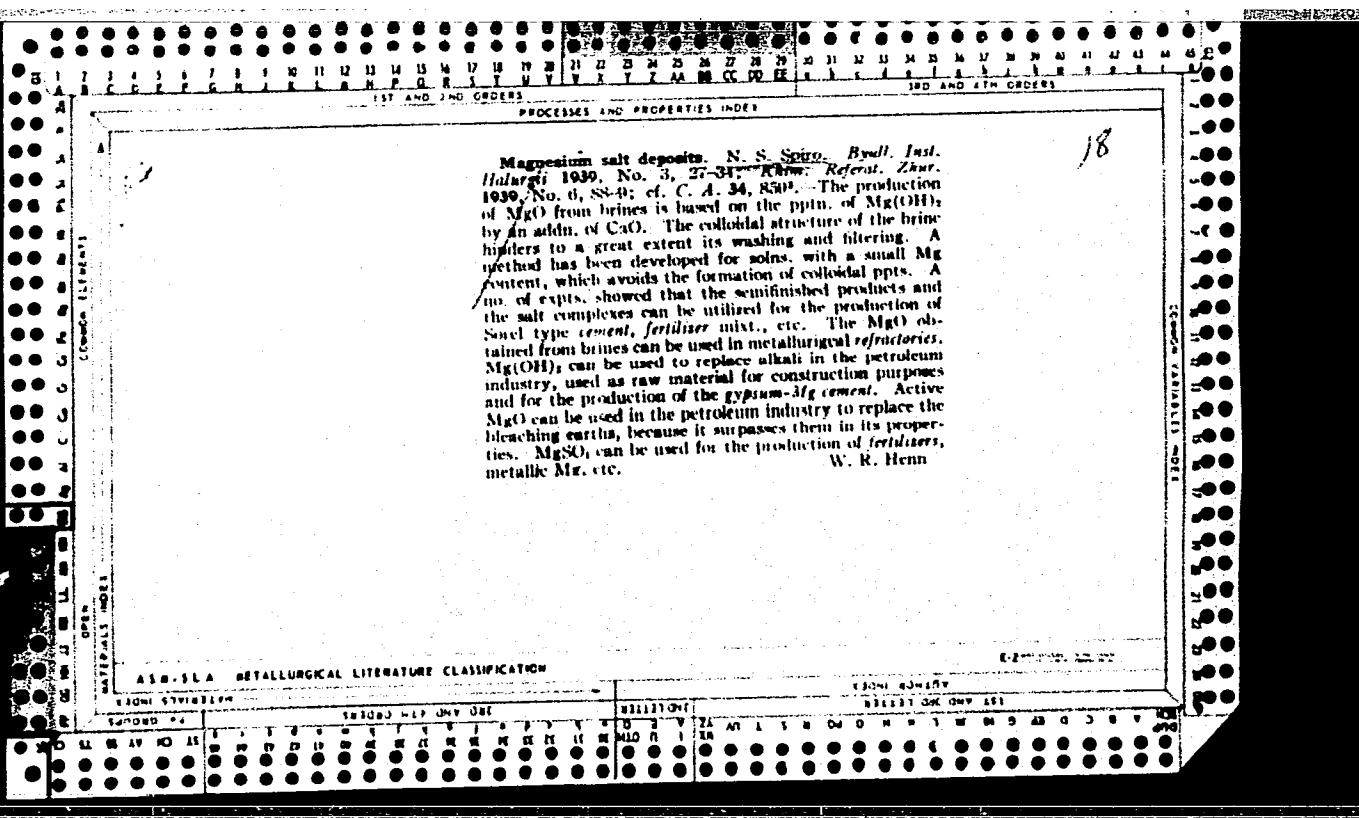
Variations in the carbonation coefficient of sea water.  
P. T. Danilchenko and N. S. Spiro, *Bull. acad. sci. U. R. S. S., Classe sci. math. nat.* 1959-14:39-58.—Carbonation coeff. ( $\text{HCO}_3^- \times 100/\text{Cl}^- = K$ ) is 1250 for av. river water and 0.16-0.72 for water from ocean or salt lakes. It is inversely proportional to salinity ( $S$  = total content of salts). The av.  $\text{HCO}_3^-$  content of fresh and sea waters is 0.0140% and 0.0148%, resp., and that of salt lakes is 0.0171%. For saline waters in direct contact with  $\text{CaCO}_3$  and atm.  $\text{CO}_2$ ,  $KS = C = \text{const.}$  (av.  $C = 3.0$ , but varies from 5.1 for Caspian Sea to 1.7 for the Gulf of Kuyal'nit'kil and is 2.8 for ocean waters). All natural waters are usually satd. with respect to  $\text{CaCO}_3$ , but occasionally they may contain an excess (Black and Caspian seas) or a deficient quantity (Baltic Sea) of it. The  $\text{CaCO}_3$  in oceans is supplied both by rivers and by the minerals present in the ocean bed. On evapn. ocean waters deposit  $\text{CaCO}_3$  and a mixt. of  $\text{MgCO}_3$  and  $\text{CaCO}_3$ ; this must result in migration of  $\text{CaCO}_3$  from the poles toward the equator where evapn. is more rapid.

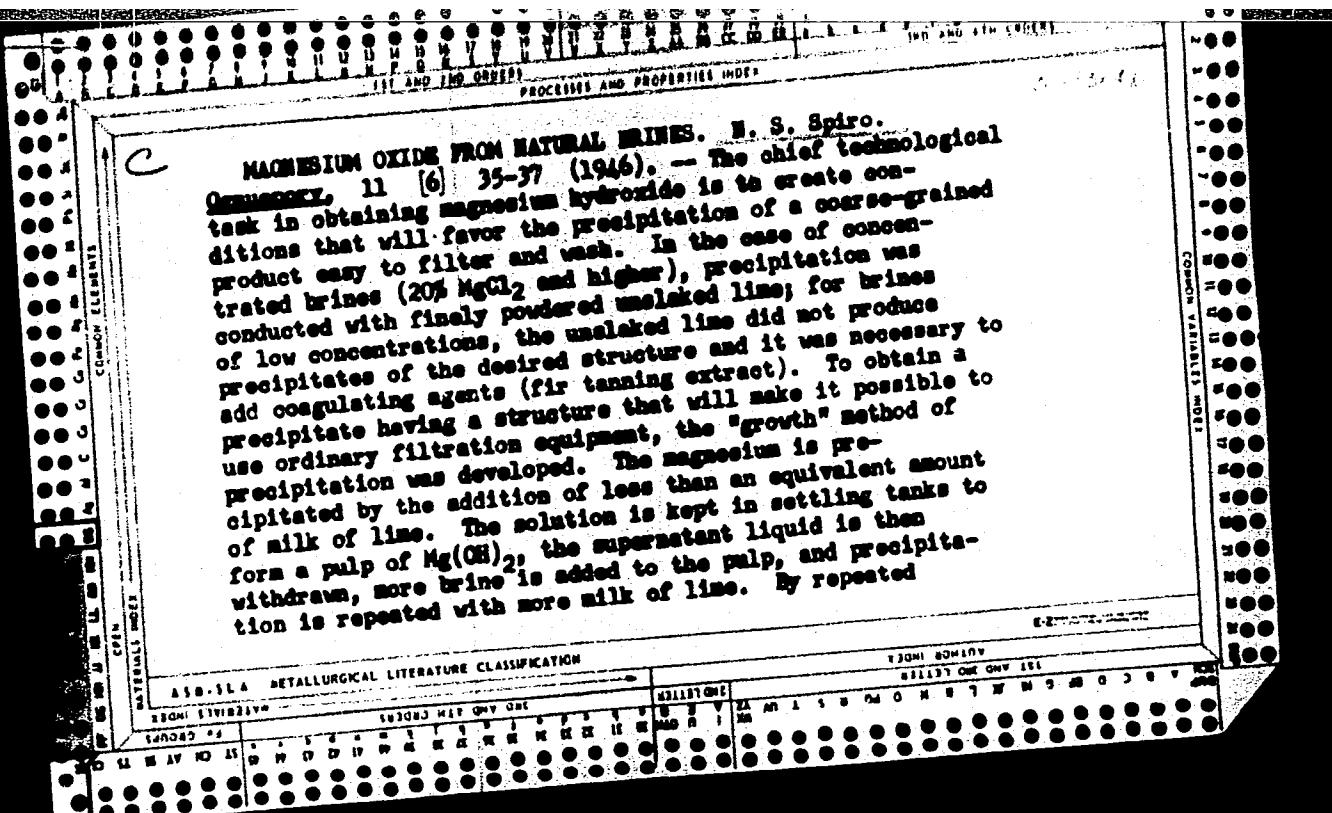
V. A. Kalichevsky











**Laws of change of the solubility.** 1. Eutonic points of polytherme in multicomponent systems. B. I. Akmunov and N. N. Sharip, *Zhur. Obrabotki Khim. (J. of Gen. Chem.)* 18, 793-801 (1948).—The concept of conventional pressure is presented. It is the pressure that a given solute alone would exert when present in a multicomponent system. The conventional pressure of any component increases exponentially with the temp. Both total and individual solubilities also increase exponentially with temp. By use of data for the system NaCl-KCl-H<sub>2</sub>O, the logs of the solubilities of each component in a multicomponent system are shown to be proportional to one another. A. J. M.

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## PROCESSES AND PROPERTIES IN 21

THE TIGER IN ASIA

**ASB-3.4. METALLURGICAL LITERATURE CLASSIFICATION**

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APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652710019-9"

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Laws of solubility changes. II. Energy characteristics of osmotic pressure of polythione in multicomponent systems. B. I. Abikunov and N. S. Spiro. *Zhur. Tekhn. Khim.* 19, No. 1, 17-23 (1969); *J. Sov. Chem. (U.S.S.R.)* 19, 15-21 (1969) (English translation); cf. *C.A.* 63, 1601b. — In considering deviations from Raoult's law in real ratios, the quantity  $\varphi$  is introduced, defined by the relation  $\varphi = K_e/K_0$ , where  $K_e$  is the osmotic const. in terms of concn. and  $K_0$  in terms of activities.  $\varphi$  is then a measure of the nonideality of the soln., and its evaluation involves the knowledge of activity constn. It is closely related to the free energy change in the system, since  $\Delta F = \Delta F_0 - \Delta F_0 = -RT \ln \varphi$ . A plot of  $\ln \varphi$  against  $1/T$  results in a straight line. Various data are analyzed using the quantities mentioned above. III. Energy characteristics of inclusions in multicomponent systems. *Zhur. Tekhn. Khim.* (J. Sov. Chem.) 20, 301-7 (1971). — Theoretical equations are derived on the basis of the "reduced equation const.", previously defined as  $\varphi = K_e/K_0$ , and they are applied to data from various sources for the systems NaCl-KCl-H<sub>2</sub>O and NaCl-MgCl<sub>2</sub>-H<sub>2</sub>O (cf. *C.A.* 77, 2871). In a 3-component system, a soln. that is ununited, with respect to one component can be considered as a new solvent for the component with respect to which the soln. is ununited. In such a system, if the constn. of one component is held const., the solv. of the other component varies exponentially with the temp. At const. temp.,  $\ln \varphi$ , and hence  $\Delta F$ , are proportional to the logarithm of the concn. of the component with respect to which the soln. is ununited. Arifit T. Miller

SPIBO, N. S.

32354

SPIBO, N. S. Zavisimost' Svoystv Atomov i ikh Soyedinyeniy ot Elyektronnoy Struktury.  
Trudy Vsesoyuz. Nauk. Issled. in-ta Galurgii VTP. 21, 1949, s. 262-335

SO: Letopis' Zhurnal'nykh Statey, Vol. 44

SPIRO, N. S.

Akhumov, E. I. & Spiro, N. S. - "Law of change of solubility. III. Energetic characterisation of the isotherms in multi-component systems." (p. 201)

SO: Journal of General Chemistry, (Zhurnal Obozreniya Khimii), 1950, Vol. 20, No. 2.

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*1951*

Law of changes of solubility. IV. Solubility equation for the isotherm in multicomponent systems. E. I. Akhunov and N. S. Spiro. *Zhur. Obrabotki Khim. (J. Gen. Chem.)* 21, 40-51 (1951); cf. *C.A.* 44, 9215a. An equation for the isotherm in multicomponent systems is rigorously derived by making use of the reduced equil. const. which was introduced in the previous paper. The equation can be solved algebraically only when it is not higher than 4th order; however, graphic methods give results of desired accuracy. Application of the equation to data from the literature for the system NaCl-KCl-H<sub>2</sub>O gave values which were in good agreement with exptl. data. V. Raoult's law. *Ibid.* 51-8. — Raoult's coeff. in expressed as the reduction of the pressure of the satd. vapor of the solvent over a soln. per unit pressure. At const. temp. and within broad concn. limits (up to satn.), Raoult's coeff. changes linearly with concn., and the slope of the curve depends on the chem. nature of the dissolved material. In unsatd. solns. having const. concn., Raoult's coeff. changes exponentially with respect to temp., and in satd. solns. the same is true. Data are given for the following systems and Raoult's coeff. is calcd. therefrom: CaH<sub>2</sub>O<sub>4</sub>-H<sub>2</sub>O (0-70°), KCl-H<sub>2</sub>O (20-100°), MgCl<sub>2</sub>-H<sub>2</sub>O (0-116°), and NaNO<sub>3</sub>-H<sub>2</sub>O (0-125°).

Paul W. Howerton

SPIRO, H. S.

"Law of change of solubility. V. Raoult's law." E. I. Akhunov and H. S. Spiro.  
(p.51)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1951, Volume 21,  
No. 1

SPIRO, N.S.

Chemical Abst.  
Vol. 48 No. 6  
Mar. 25, 1954  
General and Physical Chemistry

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The laws of change of solubility. VI. Raoult's law.  
E. I. Akhunov and N. S. Spiro. *J. Gen. Chem. U.S.S.R.*  
22, No. 3 (1952) (Engl. translation).—See *C.A.* 47, 5767c.

H. L. H.

AKHUMOV, Ye.I.; SPIRO, N.S.

Use of the logarithmic curves of solubility in multicomponent systems. Izv.Sekt.fiz.-khim.anal. 23:22-33 '53. (MLRA 7:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut galurgii.  
(Solubility) (Curves, Logarithmic)  
(Systems (Chemistry))

SPIRO N.S.

USSR:

Activity and the activity coefficient of water in binary solutions. E. I. Akhunov and N. S. Spiro. *Zhur. Pis. Khim.* 27, 688-72 (1963); cf. *C. A.* 60, 5707e.  
By use of rules developed earlier for the Raoult coeff., empirical formulas are derived for the changes in the activity of H<sub>2</sub>O in binary solns. for various solns. having the same concn., isotherms, and polytherms. J. Rovtar Leach

SP, RG, N 3

USSR.

The relation between the concentrations for reactive aqueous two-component systems. B. I. Akhunov and N. S. Spirin. Doklady Akad. Nauk S.S.R. 91, 673-6 (1953).

The properties of aq. 2-component systems that are isoactive with respect to the solvent are studied. An equation is derived showing that a linear relation exists between the inverse values of the concns. of the different 2-component systems at const. temp. This relation is illustrated by data on the systems HCl, NaOH, NaNO<sub>3</sub>, Na<sub>2</sub>CO<sub>3</sub>, MgCl<sub>2</sub>, CaCl<sub>2</sub>, and MgSO<sub>4</sub> in water. J. Rovtar Leach.

MA 65

Spiro, N.S.

USSR

✓ Genetic classification of natural waters. N. S. Spiro, I. S. Gramberg, and Ts. L. Vovk. *Doklady Akad. Nauk S.S.R.* 93, 531-4 (1953).—For the graphic projection of the chem. compn. of natural waters the same method was used which had previously been used by Kaslikarov (cf. *C.A.* 34, 1136) and Valyashko (*Trudy Vsesoyus. Nauch. Issledovatel. Inst. Galurit'* 23, 13 (1952)) for salt lake brines. The projection is given by a rectangular triangle with the mols.  $[Na_2CO_3 + Na_2(HCO_3)_2]$ ,  $MgSO_4$ ,  $CaCl_2$  in the apexes, and the mols.  $Na_2Cl$ ,  $Na_2SO_4$ ,  $MgCl_2$  in the middle of the sides. This graph includes the system  $[Na_2CO_3 + Na_2(HCO_3)_2]$ - $Na_2Cl$ - $Na_2SO_4$ - $H_2O$ ; the reciprocal system  $(Na_2^{++}, Mg^{++})$ - $(Cl, SO_4^{--})$ - $H_2O$ ; and  $Na_2Cl$ - $CaCl_2$ - $MgCl_2$ - $H_2O$ . Very characteristic is the projection of the analyses of ocean water, that from the Black Sea, the Dead Sea, the anomalous chloride waters of the Rivers Amu-Darya and Syr-Darya in Central Asia, the positions of the points for petroleum-brine waters along the side  $[Na_2CO_3 + Na_2(HCO_3)_2]$ - $Na_2Cl$ - $CaCl_2$ . Further, the diagram shows the "degeneration" of sea water in the Caspian Sea and Lake Aral by the inflow of river water. A second projection shows the compn. of silts from the Black Sea and some Asian lakes and soils, with a strong enrichment in  $MgSO_4$ . W. Eitel

Spiro, N.S.

✓ Solubility of chlorides in hydrochloric acid. E. I.  
Akhunov and N. S. Spiro. J. Appl. Chem. U.S.S.R. 27, 1  
(1954) (Engl. translation). See C.A. 49, 7032J. (1)  
U. M. R.

USSR.

Solubility of chlorides in hydrochloric acid. E. I. Akhunov and N. S. Spiro. *Zhur. Priklad. Khim.* 27, 1103-9 (1954); cf. *U.M. 35,7411c*.—The solv. of a salt MR<sub>n</sub> in an aq. soln. of an acid H<sub>n</sub>R is expressed by  $\log \varphi = a + b \log c$ , where a and b are const., c is the MR<sub>n</sub> concn. (M), and  $\varphi$  is the reduced equil. const. (cf. *C.A.*, 44, 9210a). Available data on the solv. of NaCl (30°), MgCl<sub>2</sub> (0 and 25°), AlCl<sub>3</sub> (25°), and mixts. of NaCl + KCl (25°) in aq. solns. of HCl. I. Bencowitz substantiate this relation.

Spiro, N. S.

USER/Chemistry - Physical chemistry

Card 1/1 Pub. 147 - 9/27

Authors : Akhunov, E. I., and Spiro, N. S.

Title : Equation of the state of two-component solutions

Periodical : Zhur. fiz. khim. 28/9, 1591-1598, Sep 1954

Abstract : The applicability of the van der Waals equation to two-component aqueous solutions was investigated at a wide range of temperatures and concentrations. The value of individual coefficients in the van der Waals equation, applicable to two-component aqueous solutions, was analyzed. Calculated data for two-component solutions, which confirm the possibility of applying the van der Waals equation to such two-component aqueous solutions, are presented. Certain empirical relations, based on the equation of state for solutions, were theoretically substantiated. Seven USSR references (1935-1953). Tables.

Institution : ...

Submitted : December 7, 1953

USSR/Chemistry - Physical Chemistry

Card 1/1

Authors : Akhumov, E. I., and Spiro, N. S.  
Title : About the pressure curve of saturated two-component aqueous solutions  
Periodical : Dokl. AN SSSR, 97, Ed. 2, 269 - 272, July 1954  
Abstract : The effect of critical phenomena (temperature rise) on the pressure curve of two-component aqueous solutions of highly soluble non-volatile salts is described. The pressure rises to a certain known maximum and then decreases reaching zero at a melting temperature. This phenomenon is observed in the case of salts with melting point which is lower and also much higher than the critical temperature of water. An explanation of this interesting phenomenon is given in this report. Ten references. Tables, graphs.  
Institution : The V. I. Ul'yanov Electro-technical Institute, Leningrad  
Presented by : Academician I. I. Chernyaev, March 23, 1954

Subject : USSR/Chemistry

Card 1/1 Pub. 152 - 11/19

Authors : Akhumov, Ye. I. and N. S. Spiro

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652710019-9

Title : Calculation of activity coefficients of water in two-component solutions

Periodical: Zhur. prikl. khim., 28, no.2, 205-208, 1955

Abstract : Formulas for the measurement of the activity coefficients are given. Aqueous solutions of chlorides of alkali metals and alkaline earth metals were studied at 25°C. Two tables, 4 references (all Russian: 1952-1953).

Institution: None

Submitted : 03, 1953

SPIRO, N.S.

USSR/Minerals - Argillaceous minerals

Card 1/1 Pub. 22 - 42/50

Authors : Spiro, N. S.; Gramberg, I. S.; and Vovk, Ts. L.

Title : Changes in chemical composition of argillaceous minerals

Periodical : Dok. AN SSSR 100/1, 159-161, Jan. 1, 1955

Abstract : Mineralogical data are presented regarding the changes occurring in the chemical composition of argillaceous (clayey) minerals. Two USSR references (1931 and 1951). Diagram.

Institution : The Arctic Scientific Research Institute of Geology

Presented by: Academician S. I. Mironov, June 3, 1954

Spino, N.S.

✓ Composition of exchangeable bases of argillaceous rocks  
and its relation to environmental conditions at sedimentation. N. S. Spiro, I. S. Gramberg, and Ts. L. Vovk.  
*Doklady Akad. Nauk S.S.R.* 105, 800-2 (1955).  
Exchangeable Na, K, and Ca + Mg were extd. quickly with  
NH<sub>4</sub>Cl, after an alc. water wash to remove sol. salts. Argil-  
laceous rocks of marine and continental origin were readily  
distinguished by the higher alkali content of the former.  
Permian Age rocks from the Arctic were similarly classified  
as marine or continental according to either org. residues  
present or exchangeable base content. R. G. M.

SPIRO, N.S.; GRAMBERG, I.S.; VOVK, TS.L.

Method for a comparative study of the chemical composition of terrigenous  
sedimentary rocks. Trudy Nauch.-issl. inst. geol. Arkt. 86:9-112 '56.

(MIRA 10:3)

(Rocks. . Sedimentary--Analysis) (Geochemistry)

SPIRO, N.S.; BONCH-OSMOLOVSKAYA, K.S.

Composition of absorbed clay complexes in cases of equilibrium with  
solutions such as sea water; experimental studies. Trudy Nauch.-issl.  
inst.geol.Arkt. 86:113-133 '56. (MLRA 10:3)  
(Sea water--Analysis) (Clay)

BONCH-OSMOLOVSKAYA, K.S.; SPIRO, N.S.

Method for obtaining extracts from argillaceous sedimentary rocks  
for studying compositions of readily soluble salts and the absorbed  
cation complex. Trudy Nauch.-issl.inst.geol.Arkt. 86:133-160 '56.  
(MLRA 10:3)

(Rocks, Sedimentary--Analysis)

*Spire, 11/5*

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Determination of the degree of hydration of highly soluble salts in concentrated solutions. E. I. Akhumer and N. S. Spiro. Zhur. Neorg. Khim. 2, 157-9 (1957). The  $\log N_1$  (where  $N_1$  is the concn. of the salt) vs.  $(1000/T)$  °K. curves were detd. for satd. solns. of NaCl, NaBr, and KCl and were compared with the ideal curves calcd. from the heats of fusion of the pure salt. From these curves the degree of hydration was detd. The no. of mols.  $H_2O$  were 8.19, 2.82, and 4.58 for NaCl, KCl, and NaBr, resp.

J. Rovtar Leach

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SPIRO, N.S.; GOGOLEVA, M.V.

Determining the mineral composition of clay rocks. Trudy NIIGA  
67:218-224 '58. (MIRA 12:10)  
(Clay)

5(4)

AUTHORS:

Akhumov, Ye. I., Spiro, N. S.

SOV/78-4-3-31/34

TITLE:

Activity and Activity Coefficient of Water in Saturated  
Solutions of  $\text{NaCl-H}_2\text{O}$ ,  $\text{KCl-H}_2\text{O}$ ,  $\text{NaBr-H}_2\text{O}$  (Aktivnost' i  
koeffitsiyent aktivnosti vody v nasyshchennykh rastvorakh  
 $\text{NaCl-H}_2\text{O}$ ,  $\text{KCl-H}_2\text{O}$ ,  $\text{NaBr-H}_2\text{O}$ )

PERIODICAL:

Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 3,  
pp 692-694 (USSR)

ABSTRACT:

In the present paper the thermodynamic character of water was investigated in saturated two-component aqueous salt solutions in a wide temperature range. On the basis of experimental data in saturated solutions of  $\text{NaCl-H}_2\text{O}$ ,  $\text{KCl-H}_2\text{O}$ , and  $\text{NaBr-H}_2\text{O}$  the activity  $a_1$  and the activity coefficient  $\gamma_1$  of water were computed in the temperature range between 0 and the melting temperature of the salts. The computations are given in table 1 and were carried out according to the formulas 4 and 5:

Card 1/2

Activity and Activity Coefficient of Water in  
Saturated Solutions of  $\text{NaCl}-\text{H}_2\text{O}$ ,  $\text{KCl}-\text{H}_2\text{O}$ ,  $\text{NaBr}-\text{H}_2\text{O}$

SOV/78-4-3-31/34

$$a_1 = \frac{P}{P_1^0} \quad (4)$$

$$\gamma_1 = \frac{a_1}{N_1} \quad (5)$$

From the data it may be seen that the activity coefficient of water decreases in the systems investigated with increasing concentration of the saturated salt solutions. The results can be used for thermodynamic computations of the salt equilibrium at higher temperatures. There are 1 table and 15 references, 12 of which are Soviet.

SUBMITTED: November 29, 1957

Card 2/2

SPIRO, N.S.

Symposium on salts of marine origin, held in the German Democratic Republic in 1958. Inform.biul.NIIGA no.14:7-8 '59. (MIRA 13:7)  
(Salts)

SPIRO, N.S.

Studying the evolution of the composition of ocean waters. Inform.  
biul.NIIGA no.14:59-67 '59. (MIRA 13:7)  
(Sea water--Analysis)

GRAMBERG, I.S.; SPIRO, N.S.

Experience in using geochemical data for the correlation  
and facies analysis of Permian sediments in the Khatanga  
Depression. Trudy NIIGA 98:5-35 '59. (MIRA 13:5)  
(Siberia, Eastern--Geology, Stratigraphic)  
(Geochemistry)

SPIRO, N.S.; BONCH-OSMOLOVSKAYA, K.S.

Composition of adsorbed clay bases in the case of equilibrium  
with different types of waters. Trudy NIIGA 98:36-62  
"59. (MIRA 13:5)

(Clay--Analysis) (Water--Analysis)

SPIRO, N.S.; VOVK, TS.L.

Reconstruction of the composition of waters of the Permian  
Sea. Trudy NIIGA 98:63-72 '59. (MIRA 13:5)  
(Geology, Stratigraphic) (Geochemistry)

SPIRO, M.S.; GRAMBERG, I.S.

Relationship between the carbonate content of clay rocks  
and the facies conditions of sediment formation. Trudy  
NIIGA 98:73-76 '59. (MIRA 13:5)  
(Clay--Analysis) (Sedimentation and deposition)  
(Carbonates)

SPIRO, N.S.

Chemical composition of Permian clay deposits, as related to  
the facies conditions of sedimentation. Trudy NIIGA 98:77-89  
'59. (MIRA 13:5)  
(Clay--Analysis) (Sedimentation and deposition)

SPIRO, N.S.; GRAMBERG, I.S.; VOVK, TS.L.

Use of manganese for the reconstruction of oxidation-reduction potential during the period of sediment formation. Trudy NIIGA 98:90-100 '59. (MIRA 13:5)  
(Sedimentation and deposition)  
(Oxidation-reduction reaction)

SPIRO, N.S.; DANYUSHEVSKAYA, A.I.

New method for the comparative characterization of bitumens and petroleums, based on their luminescent and capillary properties. Trudy NIIGA 98:106-119 '59. (MIRA 13:5)  
(Bitumen--Analysis) (Petroleum--Analysis)

GRAMBERG, Igor' Sergeyevich; SPIRO, Nikolay Semenovich; APLONOVA,  
Evelina Nikolayevna; SAKS, V.N., nauchnyy red.; DESHALYT, M.G.,  
vedushchiy red.; GEMNAD'YEVA, I.M., tekhn.red.

[Stratigraphy and lithology of Permian sediments in the northern  
part of the Khatanga Depression in connection with its oil  
potential] Stratigrafiia i litologija permeskikh otlozhenii  
severnoi chasti Kahtangskoi vpadiny v sviazi s problemoi naftenosno-  
sti. Leningrad. Gos. nauchn.-tekhn. izd-vo neft. i gorno-toplivnoi  
lit-ry. Leningr. otd-nie, 1960. 172p. (Leningrad Nauchno-issledovatel'-  
skii institut geologii Arktiki. Trudy, vol.71) (MIRA 13:2)  
(Khatanga region--Petroleum geology)

GRAMBERG, I.S.; SPIRO, N.S.; APLONOVA, E.N.; SAKS, V.N., nauchnyy red.; RUSAKOVA, L.Ya., vedushchiy red.; ZHIKHAREVA, M.Ya., tekhn.red.

[Stratigraphy and lithology of Permian and Triassic sediments in the northern part of the Verkhoyansk trough and adjoining folded structures] Stratigrafija i litologija permeskikh i triasovykh otlozhenii severnoi chasti Priverkhoianskogo progiba i sopredel'nykh skladchatykh sooruzhenii. Leningrad, Gos. nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, Leningr. otd-nie., 1961. 231 p. (Leningrad. Nauchno-issledovatel'skii institut geologii Arktiki. Trudy, vol.118) (MIRA 14:11)

1. Chlen-korrespondent AN SSSR (for Saks)  
(Verkhoyansk Range—Geology, Stratigraphic)

SPIRO, N.S.; GRAMBERG, I.S.

Composition of the adsorbed complex of argillaceous rocks as indicator of the conditions prevailing during the early stage of sediment formation. *Geol. i geofiz.* no.9:30-34 '61. (MIRA 14:11)

1. Nauchno-issledovatel'skiy institut geologii Arktiki, Leningrad.  
(Geochemistry) (Clay) (Adsorption)

SPIRO, N.S. (Leningrad)

Calculating the cosolubility of salts. Zhur.fiz.khim. 35 no. 10  
2363-2369 0 '61. (MIRA 14:11)  
(Salts) (Solubility)

S/081/61/000/022/012/076  
B102/B108

AUTHORS: Spiro, N. S., Danyushevskaya, A. I.

TITLE: Development of a new method of evaluating luminescence

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1961, 71, abstract  
22B510 (Tr. N.-i. in-ta geol. Arktiki, v. 119, 1961, 109-127)

TEXT: The luminescence chromatographs of the fractions of 5 samples of bitumens and coals of Soviet Arctic regions are given. Elution chromatographic methods were used to separate the hydrocarbon and tar fractions from the bitumens. For all the fractions elemental composition, molecular weight, refractive index and, by empirical calculations, the homologous series were determined. The relationships between the adsorption parameters and the molecular weight, the molecular structure, and the chemical composition of the fractions are dealt with. [Abstracter's note: Complete translation.]

Card 1/1

SPIRO, N.S.

Relation between concentration and pressure in saturated aqueous  
salt solutions. Zhur.fiz.khim. 36 no.10:2256-2261 O '62.  
(MIRA 17:4)

SPIRO, N.S.; DANYUSHEVSKAYA, A.I.

New method for the quantitative determination of bitumen in rocks.  
Neftegaz. geol. i geofiz. no.10:38-41 '63. (MIRA 17:9)

1. Nauchno-issledovatel'skiy institut geologii Arktiki.

CRAMER, F.S.; SPIRO, W.S.

~~Reconstruction of the hydrochemical conditions of ancient sea basins based on geochemical indications. Metod. paleogeog. issl. (MIRA 18:6)~~

nc.1:6-15 '64.

SPIRO, N.S.; AVERINA, M.S.

Chemical composition and properties of coals in the Aldano-  
Chul'man region of the South-Yakutsk Basin. Uch. zap. NIIGA.  
(MIRA 18:12)  
Reg. geol. no.4:150-166 '64.

SPIRO, N.S.; DANYUSHHEVSKAYA, A.I.

Change of the composition of disseminated bitumens in the  
sedimentary rocks of the Arctic in various geological epochs.  
Uch. zap. NIIGA. Reg. geol. no.4:212-218 '64.

(MIRA 18:12)

VORONOV, P.S.; SPIRO, N.S.

Composition of the absorbed cations of loose Quaternary terrigene  
sediments in the central and western sectors of western Antarctica.  
Probl.Arkt.i Antarkt. no.15:5-10 '64. (MIRA 17:4)

VORONOV, P.S., kand.geol.-mineral.nauk; SPIRO, N.S., kand.khim.nauk

Changes in the carbonate-hydroxide ratio in loose Quaternary  
deposits in the central and western sectors of eastern Antarctica.  
Inform. biul. Sov. antark. eksp. no.45:9-13 '64.

(MIRA 18:1)

1. Nauchno-issledovatel'skiy institut geologii Arktiki.

GRAMBERG, D. . .; SPIKO, N.S.; POPOV, Yu.N., red.; PETROVA, Ye.M., red.

[Paleohydrogeochemistry of the northern part of Central Siberia in the Late Paleozoic and Mesozoic.] Paleogidrokhimiia severa Srednei Sibiri v pozdнем палеозое и mezozое. Moskva, Nedra, 1965. 119 p. (Leningrad. Nauchno-issledovatel'skii institut geologii Arktiki. Trudy, vol. 142).

(MIRA 18:8)

SPIRO, N.S.; DANYUSHEVSKAYA, A.V.

Development of a new method for correlating bioluminous substances  
based on their physicochemical characteristics. Neftegaz.geol. i  
geofiz. no.7:37-40. '65. (MIRA 18:8)

1. Nauchno-issledovatel'skiy institut geologii Arkтики, Leningrad.

VORONOV, P.S.; SPIRO, N.S.

Composition of readily soluble salts in loose Quaternary  
terrigenous deposits of the central and western sectors of  
East Antarctica. Probl. Arkt. i Antarkt. no.19:10-15 '65.

(MIRA 18:5)

SPIRO, T.A.

Visean and Namurian chaetetids from the Moscow region. Paleont. zhur. no.4:24-28 '61. (MIRA 15:3)

1. Paleontologicheskiy institut AN SSSR.  
(Moscow region--Chaetetidae)

SPIRO, V.Ye., kand. tekhn. nauk

Evaluation of elastic-plastic deformations of elongated rectangular plates during compound blending. Sudostroenie 30 no.11:24-28 N '64.

(MIRA 18:3)

SPIRO, V.Ye., kand. tekhn. nauk

Conference on the structural strength and safety of a ship's  
hull. Sudostroenie 30 no.12:70 D '64. (MIRA 18:6)

1. Chlen byuro sektsii prochnosti i konstruktsii korpusa  
TSentral'nogo pravleniya Nauchno-tehnicheskogo obshchestva  
sudostroitel'noy promyshlennosti imeni akademika Krylova.

L 10309-66

EWT(m)/EWP(1)/T/ETC(m) WIV/RM

SOURCE CODE: UR/0229/65/000/009/0065/0065

ACC NR: AP5026285

29

27

P

AUTHOR: Spiro, V. Ye.

ORG: none

TITLE: Scientific-technical conference on the structural mechanics of ships  
/Leningrad, 18-19 July, 1965/

SOURCE: Sudostroyeniye, no. 9, 1965, 65

TOPIC TAGS: commerce, transportation, fleet, structural strength, shipbuilding

55

ABSTRACT: A brief report is given on the second Scientific-Technical Conference dedicated to the structural mechanics of ships. The conference was held in Leningrad on 18 and 19 July, 1965. It was attended by over 200 conferees from universities, scientific research institutes, the shipbuilding industry, and construction bureaus. Sixty reports were presented at the conference, which was divided into four sections: 1) structural strength, plasticity, and creep; 2) statics of plates and shells; 3) general question of ship structural mechanics; and 4) dynamics of ship construction. Basing its decisions upon the papers and discussions presented, the conferees recommended the following measures: a) a continuation of study of the internal forces acting on a ship in conditions of irregular wave action, leading to solution of reliability problems and durability of ship hull structures; b) organization of a joint effort of the structural mechanics and maritime quality group for coordinating

UDC: 629. 12:624.02.09(063)

Card 1/2

Card 2/2

PETERA, V.; BOBEK, K.; LAHN, V.; technicka spoluprace SPIROCHOVA, J.

Activity of SGOT, SGPT and lactic dehydrogenase in therapy.  
Cesk. gastroent. vyz. 15 no.4:241-246 Je '61.

1. Klinika chorob vnitrich v Pizni, prednosta prof. dr. K. Bobek.  
(TRANSAMINASES blood) (LACTIC DEHYDROGENASE blood)  
(TESTOSTERONE rel cpds)

TSOCHEV, Minko; CHAUSHEVA, Elka; SPIROV, Blagoi; KEVORKIAN, Agop, inzh.;  
RASHEEV, Velcho, inzh.

Studies on the setting up of correlation between separate  
branches of textile industries up to 1890. Tekstilna prom 11  
no.6:22 '62.

TSOCHEV, Minko; CHAUSHEVA, Elka; SPIROV, Blagoi; KEVORKIAN, Agop, inzh.; RASHEEV, Velcho, inzh.

Studies for determining correlation in the development of basic branches in textile industry. Trud Inst tekstil prom 4:191-205 '63.

SPIROV, G.

"Fire Prevention in Coal Mines", P. 24, (MINNO DELO, Vol. 9, No. 4,  
April 1954, Sofiya, Bulgaria)

30: Monthly List of East European Accessions, (EEAL), LC, Vol. 4,  
No.1, Jan. 1955, Uncl.

SPRING, .

Fight against accidents in the mining industry. p. 23

MINNO DELO. Vol. 10, No. 6, Nov./Dec. 1955

Sofiya, Bulgaria

So. East European Accessions List Vol. 5, No. 9 September, 1956

SPIROW, G.

A case of podophyllin poisoning. Suvr. med. 13 no.367-68 162.

1. Iz Gradskata bolnitsa - Isperikh (Glaven lekar Milev).  
(PODPHYLLUM) (CENTRAL NERVOUS SYSTEM DISEASES)  
(LIVER DISEASES) (PAPILLEDEMA)  
(EYE MANIFESTATIONS)

SPIROV, G.

Fungistatic and fungicide properties of some chemical compounds  
and preparations against the agents causing epidermophytosis,  
Trichophyton gypseum, and Aspergillus niger. Dermato-vener. Sofia  
3 no. 2:109-112 '64.

1. City General Hospital, Isperikh (Chief Physician: Milev, M.,  
[d-r]).

L 33507-66

ACC NR: AP6023498

SOURCE CODE: BU/0016/65/000/007/0405/0408

AUTHOR: Kiryakov, I.; Bonev, A.; Spirov, G.

ORG: Institute for Scientific Research in Dermatology and Venereology/ headed by Prof. P. Popkristov/ (Nachroizsledovatelski kozhno-venerologichen institut)TITLE: Some aspects of the epidemiology of lues

SOURCE: Suvremenna meditsina, no. 7, 1965, 405-408

TOPIC TAGS: epidemiology, nervous system disease, genitourinary system disease, infective disease, man

ABSTRACT: In one group, up to 65% of male syphilitic patients had contracted the infection during homosexual relationships; analysis of 154 homosexual men: ages (80 were below 25 years old) 69 'true' and 85 'occasional' or 'opportunistic' homosexuals; lues was diagnosed in 57 (37%) mostly with 'atypical' (i.e. anal, etc.) lesions. [Based on authors' Eng. abst.] [JPRS]

SUB CODE: 06 / SUBM DATE: 00Mar65 / ORIG REF: 002 / OTH REF: 015

Card 1/1

VASIL'KOV, G.V.; SPIROV, G.A.; DZHANOV, A.; SENNIKOV, M.I.;  
SELYUCHENKO, A.; DEKANOV, I.; RAKHMATULLIN, M.G.; EYSMONT, V.V.;  
KOSOVER, S.I.; TSUVERKALOV, D.A.; LESHKOV, B.G.

Information and brief news. Veterinariia 38 no.9:90-96  
S '61. (MIRA 16:8)

SPIROV, G. A. (Chief Veterinary Surgeon) and YEFIMOV, V. A. (Chief Veterinary Sanitation Inspector Veterinary Department of the Ministry of Agriculture of the RSFSR)

"For the strengthening of measures in the zoonoses control"

Veterinariya, vol. 39, no. 5, May 1962 p. 12

SPIROV, G.A.; YEFIMOV, V.A.

For the strengthening of measures in the control of zoonoses.  
Veterinariia 39 no.5:12-20 My '62 (MIRA 18:1)

1. Glavnnyy veterinarnyy vrach Upravleniya veterinarii Ministerstva sel'skogo khozyaystva RSFSR (for Spirov). 2. Glavnnyy veterinarno-sanitarnyy inspektor Upravleniya veterinarii Ministerstva sel'skogo khozyaystva RSFSR (for Yefimov).

SPIROV, I. A.

23T98

USSR/Radio Receivers  
Tuning

Jun 1947

"A Short Wave Attachment with Band-Spread Tuning",  
I. A. Spirov, 3 pp

"Radio" Vol IX, No 6

This attachment is built around a 6A8 tube and covers four bands, 19, 25, 31 and 49 meters. The most popularly used converter has been type K-416. It has proved unsatisfactory in some respects, however, and the article goes on to describe a new type of converter which is supposed to give much more satisfactory results. Well illustrated by schematic diagrams and photographic plates of the installation.

23T98

USSR / Pharmacology and Toxicology--Narcotics

V-1

Abs Jour: Ref Zhur-Biol, No 23, 1958, 107256

Author : Spirov, L. M.

Inst : Department of Legal Medicine, 1st Leningrad  
Medical Institute

Title : The Influence of Decomposition on the Content  
of Alcohol in the Blood and Brain

Orig Pub: Sb. tr. kafedry sudebn. med. 1-y Leningr. med.  
in-t, 1958, vyp 2, 182-183

Abstract: While using the method of A. I. Grinberg for deter-  
mining alcohol (A), the influence of decomposition  
on the content of A in the brain and in the blood  
of cadavers of persons subjected to legal medical  
examination was studied. It was established that

Card 1/3

5

1. SPIROV, M.
2. USSR (600)
4. Radio Operators
7. The road to mastery, Radio, No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

SPIROV, K.

"Possibility of perfecting city electric lines." Vol.5, no. 5/6, May/ June 1954, p. 22.  
Elektroenergiia, Sofiya  
SO: Eastern European Accessions list, Vol 3, no. 11, Nov. 1954, L.C.

SPIROV, M.

Operative grounding and protecting of the neutral conductor for overhead low-tension electric lines. p. 14,

Vol. 6, no. 10, Oct. 1955

ELEKTROENERGIIA  
Sofiya, Bulgaria

So: Eastern European Accession Vol. 5 No. 4 April 1956

SPIROV, M.

Electric distribution and direction of street lighting in cities. p.10.  
(ELEKTROENERGIIA, Vol. 7, no. 6, June 1956, Sofia, Bulgaria.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 12, December 1957 Uncl.

SPRIV, R.

SPRIV, R. Technical terminology and writing a Bulgarian electro-technic dictionary. p. 1.

Vol. 7, no. 11, Nov. 1956

ELEKTROSPRIVPUB

TECHNICAL

Bulgaria

See: East European Accession, Vol. 6, No. 5, May 1957

SPIROV, M.

"Electric-power supply of the cities."

p.22 (Tekhnika, Vol. 6 , no. 6, 1957, Sofia, Bulgaria)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 8, August 1958

SPIROV, R.

"Technical and economical effect of wide adaption of fluorescent lighting  
in Sofia."

p. 13 (Elektroenergiia) Vol. 8, no. 3, Mar. 1957  
Sofia, Bulgaria

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,  
April 1958

SPIROV, M.

"Using Bulgarian lignite coal for electric power production."

p. 11 (Elektroenergiia, Vol. 9, no. 1, 1958, Sofia, Bulgaria)

Monthly Index of East European Acquisitions (EEAI) LC, Vol. 7, no. 9,  
September 1958

SPIROV, M.

"National Scientific-Technical Conference on Electrical Engineering."

p. 29 (Elektroenergiia, Vol. 9, No. 6, June 1958, Sofiia, Bulgaria)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 11,  
Nov. 1958

SPIROV, M.

"Meeting for exchange of experiences with Polish electrical specialists."

ELEKROENERGIIA, Sofiia, Bulgaria, Vol. 9, no. 10/11, Oct./Nov. 1958.

Monthly List of East European Accessions Index (EEAI), The Library of Congress, Volume 8, No. 8, August 1959.

Unclassified

SPIROV, M.

"Selection of optimum parameters of electric-distribution lines for the cities  
and big villages"

Elektroenergiia. Sofiia, Bulgaria. Vol. 9, no. 12, Dec 1958

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 6, Jun 59, Unclassified

SPIROV, M.: KALBUROV, M.

"Model electrification of a large plain village in Bulgaria"

Elektroenergiia. Sofiia, Bulgaria. Vol. 10, no. 2, Feb. 1959

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 6, Jun 59, Unclassified

SPIROV, M.

"Second National Scientific-Technical Conference of the Elektrotehnika section of the Union of Scientific-Technical Associations."

ELEKTROENERGIIA, Sofiia, Bulgaria, Vol. 10, no. 4, Apr. 1959.

Monthly list of East Europe Accessions (EEAI), LC, Vol. 8, No. 6, Jun 59,  
S, pt.  
Unclassified

SPIROV, Mire, inzh.; DIMITROV, Dimcho, inzh.

Present conditions and prospects of urban electric supply in Bulgaria. Tekhnika Bulg 11 no.10:361-365 '62.

SPIROV, M., inzh.

Some problems in cabling urban electric networks. Tekh delo  
502 3 7p '63.

SPIROV, Mire, inzh.

Determining basic parameters of urban electric networks.  
Elektroenergiia 14 no.9± 6-10 S'63.

SPIROV, M., inzh.

Economic interrelations in constructing urban electric net-  
works. Elektroenergiia 15 no. 2: 2-5 F '64.

1. Energoproekt.

SPIROV, M., inzh.

Basic conditions in the development of the electric-power supply  
in Sofia. Elektroenergiia 15 no.4:3-7 Ap '64

SPIROV, M. S.

20075 SPIROV, M. S. Limfaticheskiye sosydy slizistoy obolochki tonkoy kishki cheloveka. Uracheo delo, 1949, No. 6, str. 485-88.

SO: LETOPIS ZHURNAL STATEY, Vol. 27, Moskva, 1949.

BESPALOVA, L.S.; SPIHOV, M.S., professor, zasluzhennyy deyatel' nauki, zavedu-yushchiy.

Efferent lymph vessels of the transverse colon. Arkh.anat.gist.i embr. 30 no.3:70-77 My-Je '53. (MLRA 6:6)

1. Kafedra normal'noy anatomii Kiyevskogo ordena Trudovogo Krasnogo Zname-ni meditsinskogo instituta. (Lymphatics) (Colon (Anatomy))

SPIROV, M.S., professor.

"General anatomy and physiology of the lymphatic system." Reviewed by M. S. Spirov. *Arkh.anat.gist.i embr.* 30 no. 3:78-87 My-Je '53. (MLR 6:6) (Lymphatics) Zhdanov, D.A.)

SPIROV, M.S.

SPIROV, M.S.; BOMASH, Yu.M., redaktor; BELYCHIKOVA, Yu.S., tekhnicheskiy  
redaktor

[Guide for the laboratory preparation of human muscles, ligaments,  
blood vessels, and nerves] Rukovodstvo po preparirovaniu myshts,  
sviazok, sosaudov i nervov cheloveka. Moskva, Gos. izd-vo med.  
lit-ry, 1954. 268 p. (MLRA 8:3)  
(Anatomy, Human--Laboratory manuals)

SPIROV, M.; TONCHEV, G.; GEORGIEVA, R.

New tendencies in complex therapy of pulmonary tuberculosis.  
Suvrem. med., Sofia 5 no.8:52-61 1954.

1. Iz Durzhavniia detski sanatorium, gr. Triavna. Gl. lekar:  
I.Vuglenov.  
(TUBERCULOSIS, PULMONARY, therapy)

SPIROV, M.S., professor.

"Fundamentals of topographical anatomy" D.N. Luhotskii. Reviewed by M.S. Spirov. Arkh. anat. gist. i embr. 32 no.4:86-87 O-D '55.  
(MIRA 9:5)

(ANATOMY, SURGICAL AND TOPOGRAPHICAL)  
(LUBOTSKII, D.N.)

*Spirov, M.S.*  
USSR/General Section - History, Classics, Personalities

A-2

Abs Jour : Referat Zhurn. Biol. No 16, 25 Aug 1957, 67830

Author : Spirov, M.S.

Title : The Kiev School of Anatomy and its Influence on the Development of The Natural Sciences.

Orig Pub : Vracheb. Delo, 1956, No 7, 759-762

Abstract : The founders of the Kiev school of anatomy were Professors A.P. Valter, V.A. Bets, M.A. Tikhomirov and F.A. Stefanis. Valter's work "Course in Human Anatomy" (1855) was a model handbook for his time. In 1874, Bets discovered the large pyramidal cells in the motor areas of the cerebral cortex, laid the basis for cytoarchitechtonics and used evolutionary methods in studying the cerebral cortex. Bets' ideas were the basis of the architechtonic studies of I.P. Mersheevskiy and had an influence on the work of the V.M. Bekhterev school. Tikhomirov investigated the problems of anatomy from the aspects of onto- and phylogensis.

Card 1/2

- 16 -

USSR/General Section - History, Classics, Personalities

A-2

Abs Jour : Referat Zhurn. Biol. No 16, 25 Aug 1957, 67830

His monograph "Arterial and venous variants in the human body" (1889) served as a reference book for anatomy and an excellent handbook for surgeons. In his dissertation "Distribution and interaction of the human cerebral artery" (1800), Tikhomirov first indicated the idea as to the identity of the blood supply of the entire brain as a whole. Stefanis wrote the classic work on the Lymphatic vessels of the abdominal cavity.

Card 2/2

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